

Poison Ivy Treatment

Approximately 85 percent of the population will develop an allergic reaction if exposed to poison ivy, oak or sumac, according to the American Academy of Dermatology. Nearly one-third of forestry workers and firefighters who battle forest fires in California, Oregon and Washington develop rashes or lung irritations from contact with poison oak, which is the most common of the three in those states.

Usually, people develop a sensitivity to poison ivy, oak or sumac only after several encounters with the plants, sometimes over many years.

The cause of the rash, blisters, and infamous itch is urushiol (pronounced oo-roo-shee-ohl), a chemical in the sap of poison ivy, oak and sumac plants. Because urushiol is inside the plant, brushing against an intact plant will not cause a reaction. But undamaged plants are rare.

"Poison oak, ivy and sumac are very fragile plants. Stems or leaves broken by the wind or animals, and even the tiny holes made by chewing insects, can release urushiol.

Reactions, treatments and preventive measures are the same for all three poison plants. Avoiding direct contact with the plants reduces the risk but doesn't guarantee against a reaction. Urushiol can stick to pets, garden tools, balls, or anything it comes in contact with. If the urushiol isn't washed off those objects or animals, just touching them--for example, picking up a ball or petting a dog--could cause a reaction in a susceptible person. (Animals, except for a few higher primates, are not sensitive to urushiol.)

Urushiol that's rubbed off the plants onto other things can remain potent for years, depending on the environment. If the contaminated object is in a dry environment, the potency of the urushiol can last for decades, says Epstein. Even if the environment is warm and moist, the urushiol could still cause a reaction a year later.

Any clothing that was worn including jackets must be washed or cleaned immediately. Clothes put on a year later to can still cause a rash, The urushiol does not go away or lose it's potency. If you take a coat or jacket to be cleaned place in a plastic bag and tell the cleaners that it has Poison Ivy/Oak/Sumac on it so they will know to handle the article with disposable gloves.

Almost all parts of the body are vulnerable to the sticky urushiol, producing the characteristic linear (in a line) rash. Because the urushiol must penetrate the skin to cause a reaction, places where the skin is thick, such as the soles of the feet and the palms of the hands, are less sensitive to the sap than areas where the skin is thinner. The severity of the reaction may also depend on how big a dose of urushiol the person got.

Quick Action Needed

Because urushiol can penetrate the skin within minutes, there's no time to waste if you know you've been exposed. "The earlier you cleanse the skin, the greater the chance that you can remove the urushiol before it gets attached to the skin. Cleansing may not stop the initial outbreak of the rash if more than 10 minutes has elapsed, but it can help prevent further spread.

If you've been exposed to poison ivy, oak or sumac, if possible, stay outdoors until you complete the first two steps:

- First, cleanse exposed skin with generous amounts of isopropyl (rubbing) alcohol. (Don't return to the woods or yard the same day. Alcohol removes your skin's protection along with the urushiol and any new contact will cause the urushiol to penetrate twice as fast.)
- Second, wash skin with water. (Water temperature does not matter; if you're outside, it's likely only cold water will be available.)
- Third, take a shower with soap and warm water. Do not use soap before this point because "soap will tend to pick up some of the urushiol from the surface of the skin and move it around. When I was a youngster Grandma got out the brown soap right away.

- Clothes, shoes, tools, and anything else that may have been in contact with the urushiol should be wiped off with alcohol and water. Be sure to wear gloves or otherwise cover your hands while doing this and then discard the hand covering.

Urushiol Oil is Potent

It only takes a small amount to cause an allergic reaction.

- Only 1 nanogram (a billionth of a gram) is needed to cause a rash.
- The average person is exposed to 100 nanograms per exposure.
- 1/4 ounce of urushiol is all that is needed to cause a rash in every person on earth.
- 500 people could itch from the amount covering the head of a pin.
- Specimens of urushiol several centuries old have been found to cause dermatitis in sensitive people.
- One to five years is normal for urushiol oil to stay active on any surface, including dead plants.
- The name urushiol is derived from urushi, Japanese name for lacquer.

Dealing with the Rash

If you don't cleanse quickly enough, or your skin is so sensitive that cleansing didn't help, redness and swelling will appear in about 12 to 48 hours. Blisters and itching will follow. For those rare people who react after their very first exposure, the rash appears after seven to 10 days.

Because they don't contain urushiol, the oozing blisters are not contagious nor can the fluid cause further spread on the affected person's body. Nevertheless, don't scratch the blisters because fingernails may carry germs that could cause an infection.

The rash will only occur where urushiol has touched the skin; it doesn't spread throughout the body. However, what gives the appearance that scratching spreads the rash is it may seem to spread over time instead of all at once. This is either because the urushiol is absorbed at different rates in different parts of the body or because of repeated exposure to contaminated objects or urushiol trapped under the fingernails. A stiff brush should be used to clean under the fingernails. This area is often overlooked when using the alcohol. The rash, blisters and itch normally disappear in 14 to 20 days without any treatment.

FDA also considers over-the-counter topical corticosteroids (commonly called hydrocortisones under brand names such as Cortaid and Lanacort) safe and effective for temporary relief of itching associated with poison ivy. For severe cases, prescription topical corticosteroid drugs can halt the reaction, but only if treatment begins within a few hours of exposure. "After the blisters form, the [topical] steroid isn't going to do much. The American Academy of Dermatology recommends that people who have had severe reactions in the past should contact a dermatologist as soon as possible after a new exposure.

Severe reactions can be treated with prescription oral corticosteroids. Which is highly recommended if the rash is on the face, genitals, or covers more than 30 percent of the body. The drug must be taken for at least 14 days, and preferably over a three-week period. A shorter course of treatment will cause a rebound with an even more severe rash. There are a number of OTC products to help dry up the oozing blisters, including:

- aluminum acetate (Burrows solution)
- baking soda
- Aveeno (oatmeal bath)
- aluminum hydroxide gel
- calamine
- kaolin
- zinc acetate
- zinc carbonate

- zinc oxide

Desensitization, vaccines, and barrier creams have been studied over the last several decades for their potential to protect against poison ivy reactions, but none have been approved by FDA for this purpose.

Getting Rid of the Plants

Poison ivy, oak and sumac are most dangerous in the spring and summer, when there is plenty of sap, the urushiol content is high, and the plants are easily bruised. However, the danger doesn't disappear over the winter. Dormant plants can still cause reactions, and cases have been reported in people who used the twigs of the plant for firewood or the vines for Christmas wreaths. Even dead plants can cause a reaction, because urushiol remains active for several years after the plant dies.

If poison ivy invades your yard, "there's really no good news for you. The two herbicides most commonly used for poison ivy--Roundup and Ortho Poison Ivy Killer--will kill other plants as well.

Ortho Poison Ivy Killer (active ingredient triclopyr), if used sparingly, will kill poison ivy but not the trees it. But don't use it around shrubs, broadleaf ground cover, or herbaceous garden plants. It is possible to spray the poison ivy without killing other plants if you pull the poison ivy vines away from the desirable plants and wipe the ivy foliage with the herbicide, or use a shield on the sprayer to direct the chemical.

If you don't want to use chemicals, manual removal will get rid of the ivy if you're diligent. You must get every bit of the plant--leaves, vines, and roots--or it will sprout again.

The plants should be thrown away according to your municipality's regulations. Usually placed in plastic bags. Although urushiol will break down with composting, it's not recommended because the plants must be chopped into small pieces first, which just adds to the time you're exposed to the plant and risk of a rash. Never burn the plants. The urushiol can spread in the smoke and cause serious lung irritation.

The American Academy of Dermatology recommends that whenever you're going to be around poison ivy--trying to clear it from your yard or hiking in the woods--you wear long pants and long sleeves and, if possible, gloves and boots. Wear plastic gloves over cotton gloves when pulling the plants. Plastic alone isn't enough because the plastic rips, and cotton alone won't work because after a while the urushiol will soak through.

Identification

You have to know what to look for. The famous rule "leaves of three, let it be" is good to follow, except that some of the plants don't always play by the rules and have leaves in groups of five to nine. To avoid these plants and their itchy consequences, here's what to look for.

Poison Ivy

- grows around lakes and streams in the Midwest and the East
- woody, ropelike vine, a trailing shrub on the ground, or a free-standing shrub
- normally three leaflets (groups of leaves all on the same small stem coming off the larger main stem), but may vary from groups of three to nine
- leaves are green in the summer and red in the fall
- yellow or green flowers and white berries



**Leaves of 3 Let it be
Poison Oak**

- eastern (from New Jersey to Texas) grows as a low shrub; western (along the Pacific coast) grows to 6-foot-tall clumps or vines up to 30 feet long
- oak-like leaves, usually in clusters of three
- clusters of yellow berries



Poison Sumac

- grows in boggy areas, especially in the Southeast
- rangy shrub up to 15 feet tall
- seven to 13 smooth-edged leaflets
- glossy pale yellow or cream-colored berries



can be found mainly in the eastern United States. To identify Poison Sumac, look for the fruit that grows between the leaf and the branch. Nonpoisonous sumac has fruit growing from the ends of its branches



There are about 7-13 leaflets forming a feather-like appearance. The foliage has brilliant orange or scarlet coloring in the fall.